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No. 97-1709

In the Supreme Court of the United States
October Term, 1997

KUMHO TIRE COMPANY, LTD., *et al.*,

Petitioners,
v.

Patrick CARMICHAEL, *et al.*,

Respondents.

On Petition For Writ Of *Certiorari* To The
United States Court Of Appeals For The Eleventh Circuit

BRIEF OF *AMICUS CURIAE* INTERNATIONAL ASSOCIATION OF ARSON INVESTIGATORS IN SUPPORT OF RESPONDENTS

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QUESTION PRESENTED

Amicus will address the following question: Whether the Court's analysis of expert scientific testimony under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), is applicable to other kinds of expert testimony, such as expert testimony used in prosecuting arsonists and other criminals?

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Zimmerman v. State, 693 A.2d 311 (Del. 1997) 2

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Fed. R. Evid. 702 ..... *passim*

OTHER AUTHORITIES:

American Psychological Association, Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family 10 (1996) 20
Barnes, Cynthia Lynn, Annotation, *Admissibility of Expert Testimony Concerning Domestic Violence Syndromes to Assist Jury in Evaluating Victim's Testimony or Behavior*, 57 A.L.R. 5th 315 (1998) 20
Bowman, Alana, *A Matter of Justice: Overcoming Juror Bias in Prosecutions of Batterers Through Expert Witness Testimony of the Common Experiences of Battered Women*, 2 S. Cal. Rev. L. & Women's Stud. 219, 229 (1992) 21

Bureau of Justice Statistics: Violence Against Women: Estimates from the Redesigned Survey, NCJ-154348, 3 (August 1995) 20
FBI, Uniform Crime Reports for the United States 213 (1996) 21
FBI, Uniform Crime Reports for the United States 214 (1996) 23
Hamilton, Heather G., *The Movement from Frye to Daubert: Where Do the States Stand?*, 38 Jurimetrics J. 201 (1998) 1
Stone, Audrey E. and Rebecca J. Fialk, *Criminalizing the Exposure of Children to Family Violence: Breaking the Cycle of Abuse*, 20 Harv. Women's L.J. 205 (1997) 20,21

INTEREST OF THE *AMICUS CURIAE*[1]

The **International Association of Arson Investigators** ("**IAAI**") represents more than 16,000 fire and arson investigators from governmental agencies and the private sector. Its members consist of fire, police, and insurance professionals, private investigators, scientists, and attorneys who belong to 49 chapters in the United States and to chapters in Australia, New Zealand, Israel, and Sweden.

Amius is concerned with actions in both federal and state courts. The Court's ruling regarding the standards to be applied by federal courts to expert testimony submitted under Fed. R. Evid. 702 will not directly, but will indirectly, affect state court actions. Congress' decisions to adopt the Federal Rules of Evidence, in general, and to adopt Fed. R. Evid. 702, in particular, have been widely copied by state legislatures and state supreme courts. Thus, 46 states have adopted the text of Fed. R. Evid. 702, either in whole or in part. Heather G. Hamilton, *The Movement from* Frye *to* Daubert*: Where Do the States Stand?*, 38 Jurimetrics J. 201, 210 (1998).[2] Thirty-

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[1] Pursuant to Supreme Court Rule 37.6, *amicus* hereby indicates that no counsel for a party in this case authored this amicus brief in whole or in part. No parties or entities, other than *amicus*, its supporters, or counsel, made a monetary contribution to the preparation or submission of this brief.

The brief is being filed with a blanket written consent of the parties for all *amici* which has been lodged with the Clerk.

[2] The states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Delaware, the District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. *Id.*

three states have adopted *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), "in essence." *Id.* at 209.[3]

[3] *See also Moore v. State*, 915 S.W.2d 284 (Ark. 1996); *State v. Porter*, 698 A.2d 739 (Conn. 1997); *Zimmerman v. State*, 693 A.2d 311 (Del. 1997); *Travers v. District of Columbia*, 672 A.2d 566 (D.C. 1996); *Chester v. State*, 473 S.E.2d 759 (Ga. 1996); *State v. Maelega*, 907 P.2d 758 (Haw. 1995); *State v. Parkinson*, 909 P.2d 647 (Idaho 1996); *Jervis v. State*, 679 N.E.2d 875 (Ind.1997); *Collins v. Commonwealth*, 951 S.W.2d (Ky. 1997); *Mensink v. American Grain*, 564 N.W.2d 376 (La. 1997); *State v. Quatrevingt*, 670 So.2d 197 (La. 1996); *State v. Taylor*, 694 A.2d 907 (Me. 1997); *Commonwealth v. Fowler*, 685 N.E.2d 746 (Mass. 1997); *State v. Cline*, 909 P.2d 1171 (Mont. 1996); *Nevada Emp. Sec. Dep't. v. ANR Holmes*, 914 P.2d 611 (Nev. 1996); *New Hampshire v. Morahan*, 697 A.2d 916 (N.H. 1997); *State v. Harvey*, 699 A.2d 596 (N.J. 1997); *State v. Anderson*, 881 P.2d 29 (N.M. 1994); *State v. Goode*, 461 S.E.2d 631 (N.C. 1995); *Fargo v. McLaughlin*, 512 N.W.2d 700 (N.D. 1994); *Adult v. Jasko*, 637 N.E.2d 870 (Ohio 1994); *Pennington v. State*, 913 P.2d 1356 (Okla. 1995); *State v. Lyons*, 924 P.2d 802 (Or. 1996); *State v. Quattrocchi*, 681 A.2d 879 (R.I. 1996); *State v. Dinkins*, 462 S.E.2d 59 (S.C. 1995); *Kuper v. Lincoln-Union Elec. Co*, 557 N.W.2d 748 (S.D. 1996); *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d 257 (Tenn. 1997); *Merrell Dow Pharmaceuticals., Inc. v. Havner*, 956 S.W.2d 532 (Tex. 1997); *State v. Crosby*, 927 P.2d 638 (Utah 1996); *State v. Rolfe*, 686 A.2d 949 (Vt. 1996); *Spencer v. Commonwealth*, 393 S.E.2d 609 (Va. 1990); *State v. Wyatt*, 482 S.E.2d 147 (W. Va. 1996); *State v. Walstad*, 351 N.W.2d 469 (Wisc. 1984); *Springfield v. State*, 860 P.2d 435 (Wy. 1993). *See also State v. Porter*, 698 A.2d 739, 745 & n.9 (Conn. 1997) (summarizing cases).

STATEMENT OF THE CASE

This case arises from a fatal automobile accident. On July 6, 1993, plaintiff Patrick Carmichael was driving his van on an Alabama highway when the right rear tire blew out, causing the vehicle to crash. Six passengers were ejected, one was killed, and all occupants were injured. JA 27.

All the victims joined in this diversity suit in federal court, alleging that the right rear tire, which had been designed and manufactured by defendant Kumho & Company, was defective. JA 28. Alabama law imposes strict liability on a person who puts a defective product into a consumer's hands; the exercise of all possible care by defendants is immaterial. JA 31-32. Consequently, plaintiffs' sole legal burden was to convince a jury that it was more likely than not that this tire was defective. JA 31-32.

To answer this narrow question, plaintiffs asked George Edwards to determine the cause of the blowout. JA 96. Edwards is an eminently qualified expert in the field of tire failure analysis. He has inspected thousands of tires for failures and defects during his fifty years in the tire industry, JA 421, has been the president of a tire testing laboratory approved by the U.S. Department of Transportation, and has been the president of a radial tire manufacturing company. JA 338. He has published "hundreds" of peer-reviewed technical articles on tires and has held tire consulting contracts with both Goodyear Tire & Rubber Company and Bridgestone Tire Research. JA 338.

Edwards carefully analyzed the tire using the methodology of "failure analysis." JA 421. Failure analysis is used in almost every discipline in which product failures occur. JA 421. Both the methodology and the specific factors Edwards used in his analysis are recognized and used by tire companies and independent tire experts. JA 421.

Edwards physically examined the tire and looked for all possible causes of failure. JA 419-420. He looked for signs of abuse by consumers by examining tread wear, bead grooving, and sidewall cords. JA 420. He did not find any evidence of abuse. *Id.*

He also looked for evidence of a manufacturing defect. *Id.* He found evidence of a manufacturing defect in the form of inadequate protective rubber in a sidewall. JA 420.

Edwards stated that it is generally accepted in the tire industry that tires which fail under "normal" conditions (absent abuse) are defective; this is because a tire's "carcass" should last twice as long as its tread. JA 421. Finding no evidence of abuse, and affirmative evidence of defect, Edwards concluded that the tire failed because of "defective adhesion in the tread belts system" – a "defect" for purposes of Alabama strict liability law. JA 421. Nothing in the record, including the testimony of defendants' expert, Michael Dodson, disparages the method used by Edwards or controverts his assertion that the tire industry presumes that if abuse is ruled out as a cause the tire must have failed because of a design or manufacturing defect. JA 408-411, 425-435 (Dodson's testimony).

Unfortunately, Edwards became too ill to testify at his scheduled deposition and he transferred the case to his employee, Dennis Carlson. JA 96-7. To assist Carlson, Edwards carefully reviewed his empirical data, analytic methods, and conclusions with Carlson before Carlson was deposed. JA 421.

Carlson apparently did not need much help as he had considerable experience of his own as an expert in tire failure analysis. Carlson earned a master's degree in mechanical engineering from the Georgia Institute of Technology in 1978. JA 415. Between the time he earned his degree and the time he became employed with Edwards in 1994 he worked only two jobs: for ten and one-half[4] years as a Research Engineer for Michelin Americas Research & Development, primarily in tire testing, and for seven years as a Senior Project Engineer in tire failure analysis for S.E.A., Inc., a consulting firm. JA 415-16. Nothing in the record indicates that defendants challenged Carlson's qualifications as an expert witness.

Michelin entrusted Carlson with designing and performing tests in which tires were made to fail and then analyzing why they

[4] Carlson actually began work at Michelin in 1977, before he received his graduate degree.

failed. JA 108-109. As part of his duties he performed "thousands" of control failure simulation tests on tires manufactured by Michelin and on tires manufactured by its competitors. JA 109-111.

In this case, all experts agree that the tire blew out because the tire's belts separated. JA 248, 421, 431-32. Significantly, at Michelin Carlson had conducted control failure simulation tests to isolate the particular causes for belt separation. He was personally responsible for ensuring the quality and accuracy of several of these tests. JA 113. He was given the task of finding a reliable test method for assessing the causes of belt edge separations. JA 113. He was involved in many tests performed on abused tires to determine what happened to them and was responsible for quality control of these tests. JA 131. At Michelin's direction, he took great pains to control quality, putting test procedures into writing, assuring that workers followed procedures, and examining tires himself. He also analyzed statistics to assure reliability and validity of the tests. JA 131-32.

While Carlson worked at Michelin several other tire companies had problems with belt separations. Michelin gave him the task of designing a tire that used an "end cap" to stabilize the edge of the belts and he actually had built such tires. JA 139. The tire in this case utilized the same basic design as the ones he designed and built, employing a nylon end cap. JA 139.

Carlson left Michelin to take a position as Senior Research Engineer with S.E.A., a consulting firm involved primarily in litigation support. JA 97, 167. Although he used "failure analysis" in other fields he specialized in tire failure analysis. JA 416. He testified frequently as an expert witness. JA 167-68. While at S.E.A. Carlson worked for both plaintiffs and defendants, but primarily on behalf of defendants. JA 169. While at S.E.A. he demonstrated his professionalism by refusing to bend to the will of clients. He was once fired by an S.E.A. client who did not like his conclusions. Carlson deposition 147-48.

In 1994, Carlson left S.E.A. to work with George. R. Edwards, Inc., a tire failure consulting firm that works primarily with plaintiffs. JA 170. Despite the hopeful expectations of the injured plaintiffs who hired Edwards's firm, in the great majority of the

cases in which Carlson was asked to determine the cause of tire failure he found no evidence of design or manufacturing defect, concluded that the manufacturer was not at fault, and recommended that a lawsuit not be filed. JA 285, 384-85. According to Carlson, the rate of defects in tires is low, JA 279-84; defects are present in "a small percentage of the tires that I see." JA 210. Tires, in general, wear out before they blow out. JA 421, 279-284. Accordingly, in examining tires for defects, Carlson gives the manufacturer the benefit of any doubt. Carlson deposition in *Tillery*, 137.

Both plaintiffs' and defendants' experts in this case agree completely on the method for ascertaining the cause of tire failure, on the methods appropriately used to examine a tire, on the possible causes of failure, and on the indicators used to determine the cause of failure. They also agreed on what the failure in this tire was. The only disagreement is *why* this tire failed; the methodologies are the same, only the *conclusions* differ.

Carlson and Edwards testified that a process-of-elimination method of proof, JA 36, fn.7, similar to the well-known differential diagnosis used by treating physicians, JA 237, is used by tire experts in general and was used by them to ascertain the cause of failure of this tire. JA 237, 421. It was used by Dodson in his analysis of the tire. JA 430-435. The record is uncontroverted: this mode of analysis is the standard in this industry and is relied on day-to-day by tire manufacturers and forensic engineers.

Edwards, Carlson, and Dodson performed the same kind of examination of the tire: they took pictures and performed a physical examination; none of them thought x-rays, chemical tests, or decortication were prerequisites for reaching conclusions regarding cause of failure and none of them undertook such tests. JA 330-331 (Edwards and Carlson); JA 180-181, 267-272 (Carlson); JA 408-411, 425-435 (Dodson).

Experts for both parties testified that the tire in this case failed because of separation. JA 248, 421, 431-432. Carlson testified that there are only two causes for tire failure by separation: abuse or defect. JA 277-78. Edwards said the same thing. JA 421.

Dodson's discussion is likewise limited to these two causes. JA 431-432.

In this case the only kind of abuse at issue is "overdeflection," which occurs when a tire is underinflated, overloaded, or both. JA 34. Thus, Edwards, Dodson and Carlson looked for the same telltale signs of overdeflection: greater tread wear on the shoulder than in the center of the tire; sidewall deterioration or discoloration; abnormal bead grooving; and rim flange impressions. JA 102, n. 8; JA 34, 43, 420. Many research papers describing how to analyze tread wear have been subjected to peer review and published. JA 228-29. "Hard and fast" rules govern determinations of whether the bead groove is abnormal. JA 225. Carlson testified in copious detail about how a skilled tire expert analyzes and interprets these signs. JA 211-214, 225-235. Again, the method is well thought out, well-regarded, and was used by experts for both plaintiffs and defendants in this case.

Carlson and Edwards eliminated abuse as a cause and concluded that there was a defect in the tire. JA 248, 331, 421. Dodson used the same method but arrived at a different conclusion, eliminating defect and finding that the tire failed because of abuse. JA 431-432. Dodson never indicated that there were other tests that Carlson and Edwards should have performed, that there were other factors that they should have analyzed, that their physical examination of the tire was inadequate, or that their method would not yield valid and reliable results. JA 408-411, 425-435.

The District Court found that Carlson's testimony was "scientific," thus subject to review under specific factors enumerated in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 594-95 (1993). JA 42-43. The court analyzed these factors—testability, publication and peer review, error rate, and acceptance in the scientific community—and found that Carlson's testimony failed each one. It excluded him from testifying and, because without his testimony there was no evidentiary showing of defect, it granted summary judgment for defendants. JA 36-44.

The Court of Appeals reversed and remanded. It found that Carlson's testimony was not "scientific," but was based in

experience and observation, and therefore held that the specific criteria of *Daubert*
did not apply. JA 102.

SUMMARY OF ARGUMENT

Petitioners and their *amici*, citing , Einstein, Popper, and Kant, characterize this case as being about epistemology and the history and philosophy of science. We see it as a case about car tires, and we urge the Court to decline the invitation to see it much more broadly.

In *Daubert* the Court dealt with the standards involved in qualifying expert witnesses to testify about matters at the outer edges of human knowledge. This is not such a case, and neither are the millions of criminal cases annually in which experts, qualified by virtue of "technical" or "specialized" knowledge, testify for the prosecution. These cases are our concern.

Everything humans "know" about the physical world can be traced to science, from teratogenics to a child's discovery, by throwing a spoon from a high chair, that things you let go of reliably drop. But calling all inquiry "science," and all knowledge "scientific," doesn't help trial judges resolve cases.

On the continuum of knowledge and inquiry the experts in *Daubert* represent one pole and the child with the spoon another. The cases with which we are concerned, in which arson investigators determine the causes of fires, police officers testify about the *modus operandi* of drug dealers, and social workers testify about the effects of domestic violence, fall between the poles but are much more like the child with the spoon than they are like *Daubert*. They are not hard to resolve and they should not create long collateral proceedings (*Daubert* hearings).

Our concern is that the specific standards the Court articulated for the enterprise "science" not become the particular standards for arson investigation, other police work, or social work.

The Court should emphasize that the specific but non-exclusive factors for evaluating scientific evidence the Court articulated in

Daubert—(1) whether the technique or theory used may be tested or refuted; (2) whether the technique or theory has been a subject of peer review or publication; (3) the known or potential rate of error of a technique; and (4) the degree of acceptance of a theory or technique within the relevant scientific community, *Daubert*, 509 U.S. at 589-95—are an example of how the general principle of assuring reliability was applied in a specific, highly specialized context.

The Court should emphasize that trial courts should not try to *create* standards of reliability, but should look at the enterprise in which the offered expert is engaged to *discover* the standards to which the community holds that enterprise, keeping in mind that the purpose of the inquiry is to allow juries to hear information which will assist them in their role as factfinder.

Saying more would be no virtue. *See Daubert*, 509 U.S. at 600 (Rehnquist, C.J., concurring in part, dissenting in part).

ARGUMENT

I. THE COURT SHOULD CONFIRM THAT WHILE JUDICIAL "GATEKEEPING" IS REQUIRED FOR ALL EXPERT TESTIMONY, THE FOUR SPECIFIC "FACTORS" HIGHLIGHTED IN *DAUBERT* AS APPROPRIATE BUT NON-EXCLUSIVE TESTS FOR ASSESSING THE RELIABILITY OF EXPERT TESTIMONY REGARDING NOVEL SCIENCE SHOULD BE LIMITED TO CASES INVOLVING NOVEL SCIENCE.

A. Decisions to Exclude the Expert Testimony of Experienced and Skilled Law Enforcement Officers Because of Their Inability to Meet the *Daubert* Factors Would Be Not Only Unwelcome But Unwarranted, As Such Decisions Would Ignore the *Daubert* Court's Repeated Admonitions Not to Treat the Four Factors It Enumerated as a "Definitive Checklist."

Across America, in the daily grind of the criminal justice system, prosecutors rely on witnesses who, through a combination of "training" and "experience," have amassed "technical" and "specialized" knowledge[5] of all kinds that enables lay jurors to identify, understand— and convict—all types of criminals, from Mafia kingpins, international terrorists, and inner-city drug lords to drunk drivers, child abusers, pickpockets, and car thieves. Typically, these expert witnesses are police officers, social workers, and domestic violence counselors who may not have earned graduate scientific degrees in their fields of expertise but who collectively have amassed and synthesized decades of valuable experience.

This Court has extolled the virtue of their kind of expertise in discussing river pilots:

> A pilot does not require a formalized technical education so much as a deta[illegible] and extremely intimate, almost intuitive, knowledge of the weather, waterways and conformation of the harbor or river which he serves. This seems to be particularly true of the approaches to New Orleans through the treacherous and shifting channel of the Mississippi River.

Kotch v. Board of River Port Pilot Commissioners, 330 U.S. 552, 558 (1947). Those pilots might be unable to describe the scientific basis for what they do, as their skills and knowledge are born of experience, not learned from experiments nor culled from peer-reviewed journals. Their error rate would be highly speculative. There is no relevant scientific community to review their work. But when you want to navigate the treacherous and shifting Mississippi, they're the people you call.

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[5] These terms come from Federal Rule of Evidence 702, which *Daubert* construed: "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise."

Subjecting the testimony of the prosecution witnesses described here to the specific factors of *Daubert* would be problematic, would squander their hard-won experience, and, as a direct consequence, would radically tilt the playing field in favor of criminal suspects.

There is consensus in interpreting this Court's pronouncement that trial courts should act as "gatekeepers" to screen proffered expert testimony. This requirement of *Daubert* applies to *all* expert testimony, regardless of whether the expert is testifying on the basis of "scientific, technical, or other specialized knowledge," and regardless of whether such knowledge is grounded in the expert's "knowledge, skill, experience, training or education." Fed. R. Evid. 702. At least, we have found no court or commentator who dissents from that view. We see no reason to disturb that consensus.

However, as noted in the Petition for *Certiorari* filed in this case, there is confusion among lower courts as to whether the four specific factors enumerated by the *Daubert* Court were intended to apply to all types of *expert* testimony (including what the Advisory Committee to the Federal Rules of Evidence described as so-called "'skilled' witnesses, such as bankers or landowners testifying to land values" highlighted by the Advisory Committee Note accompanying Fed. R. Evid. 702), all types of *scientific* testimony (including everything from "hard science" to "soft science," from theoretical science to applied science), or merely to *novel theories in the hard, research sciences*, such as the fields of teratology, epidemiology, and oncology, which were the focus of dispute in *Daubert* and in *General Electric Co. v. Joiner*, 118 S. Ct. 512 (1997).

Interestingly, while four of Petitioners' *amici* categorically assert that this Court actually intended (or should have meant) to have the *Daubert* factors apply to all types of expert testimony,[6]

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[6] So, for example, the Products Liability Advisory Council asserts that "the application of the *Daubert* factors to *all types of expert testimony* is consistent with this Court's approach to scientific, technical, and specialized knowledge in a variety of contexts," PLAC Br. at 22 (emphasis added); the American Insurance Association maintains that "there is no utility in creating hair-splitting distinctions among scientific, technical, and specialized

the other seven *amicus* briefs are silent on whether the factors should apply to all varieties of expert opinion testimony or just scientific and technical expertise.

If the authors of the four briefs had been members of the *Daubert* Court then the *Daubert* opinion might have said what they claim it says. But they weren't and it doesn't. Instead, *Daubert* says quite the opposite. To be sure, the Chief Justice asked, does "all this dicta apply to an expert seeking to testify on the basis of 'technical or other specialized knowledge' . . . or are the 'general observations' limited only to 'scientific knowledge'?" *Daubert*, 509 U.S. at 600 (Rehnquist, C.J. and Stevens, J., concurring in part and dissenting in part). But Justice Blackmun's answering footnote left no room for doubt. After noting, "Rule 702 also applies to 'technical, or other specialized knowledge,'" he stressed, "*[o]ur discussion is limited to the scientific context* because that is the nature of the expertise offered here." *Daubert*, 509 U.S. at 590 n.8 (emphasis added).[7]

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knowledge," AIA Br. at 15 (footnote omitted); the Solicitor General cautions that "[d]istinguishing between categories of experts for purposes of Rule 702 would pose serious practical problems. . . . There is . . . a strong need for one general framework when evaluating the admissibility of expert testimony and evidence under Rule 702," U.S. Br. at 13, n.2; and the American Tort Reform Association debunks "the myth that the universe is neatly divided between the 'scientific' and the 'nonscientific,' and that different rules should apply to each. Such a dichotomy does not exist." ATRA Br. at 13.

[7] At the same time, the Court issued three plainly worded warnings, cautioning that even when application of the *Daubert* factors would be appropriate—that is, when scientific testimony is under examination—(1) "[m]any factors will bear on the inquiry, and *we do not presume to set out a definitive* checklist or *test*," 509 U.S. at 593 (emphasis added); (2) that lower courts should not construe the Supreme Court's opinion as imposing rigid "requirement[s]," as that "would be at odds with the 'liberal thrust' of the Federal Rules and their general approach of relaxing the traditional barriers to 'opinion' testimony,'" *id.* at 588 (internal citation omitted); and (3) that the inquiry conducted by a trial court should always be a "flexible one," *id.* at 592.

B. Application of the *Daubert* Factors to Non-Scientific Law Enforcement Testimony Would Impede the War on Crime.

Expert witnesses serve an especially significant role in criminal prosecutions and in related civil cases. Expert witnesses occasionally testify in criminal cases on the basis of relatively novel scientific theories and techniques, such as DNA testing to identify criminals. The testimony of law enforcement experts on such matters is typically subjected to—and typically passes—rigorous scrutiny under the four factors highlighted by this Court in *Daubert* as appropriate for novel scientific matters. *See, e.g., United States v. Beasley*, 102 F.3d 1440, 1444-48 (8th Cir. 1996), especially cases cited at 1447 n.4. The application of the *Daubert* factors in such cases is entirely fitting, just as it was in *Daubert* itself and in *General Electric v. Joiner*.

However, the application of the *Daubert* factors to expert law enforcement testimony that does not implicate novel scientific theories, methodologies, or techniques is not only inappropriate but wasteful at best and dangerous at worst.

Law enforcement officers offer expert opinions every day in nearly every jurisdiction in the country. Unlike the novel scientific theories about the cause of birth defects at issue in *Daubert* or the novel scientific theories about the causes of cancer at issue in *Joiner*, the great bulk of expert testimony provided by law enforcement officers does not involve scientific theories, methodologies, techniques, or data in any respect, let alone untried and untested science. Instead, law enforcement officers testify about such things as accident reconstruction,[8] fingerprint, footprint,

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[8] *See, e.g., United States v. Kaspers*, 47 M.J. 176, 179 (C.A.A.F. 1997) (accident reconstruction testimony broadly admissible under *Daubert*); *Jones v. State*, 698 So.2d 1280, 1281 (Fla. 1997) (police officer's accident reconstruction testimony regarding fatal crash admissible as specialized knowledge based on 120 hours training and investigation of 72 other vehicular homicides); *State v. Gregoroff*, 951 P.2d 578, 580 (Mont. 1997) (testimony of highway patrol officer regarding accident reconstruction in which she relied on process of elimination, i.e., "absence of evidence of evasive action or

and handprint analysis,[9] handwriting analysis,[10] firearms markings and toolmarks,[11] the unique characteristics of guns, bullets, and shell casings,[12] and bloodstain pattern identification.[13]

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overcorrection" to conclude that driver "had passed out and fallen asleep at the wheel" admissible, under state equivalent of Fed. R. Evid. 702 and *Daubert*, as specialized knowledge based on eight years of experience, four weeks of training, and investigation of 200 accidents).

[9] *See, e.g., United States v. Sherwood*, 98 F.3d 402 (9th Cir. 1996) (fingerprint); *Commonwealth v. Ghee*, 607 N.E.2d 1005, 1010 (Mass. 1993) (fingerprint); *State v. Smith*, 868 S.W.2d 561, 576-77 (Tenn. 1994) (fingerprint); *State v. Runningeagle*, 859 P.2d 169, 179 (Ariz. 1993), *cert. denied*, 510 U.S. 1015 (1993) (footprint); *Caldwell v. State*, 436 S.E.2d 488 (Ga. 1993) (footprint testimony admissible); *Chumbler v. Commonwealth*, 905 SS.W.2d 488 (Ky. 1995) (same); *State v. Boobar*, 637 A.2d 1162, 1167 (Me. 1994) (same); *State v. Poole*, 688 N.E.2d 591, 600-01 (Ohio Ct. App. 1996) (same).

[10] *See, e.g., United States v. Starzecpyzel*, 880 F. Supp. 1027, 1036, 1041, 1046-47 (S.D.N.Y. 1995) (conceding that "[w]ere the Court to apply *Daubert* to the proffered FDE [Forensic Document Examination] testimony, it would have to be excluded," but admitting such experience-based expert testimony of certified Forensic Document Examiner, based on expert's specialized knowledge, after concluding *Daubert* does not apply); *State v. Loza*, 641 N.E.2d 1082, 1101 (Ohio 1994) (finding handwriting analysis admissible).

[11] *See, e.g., United States. v. Murphy*, 996 F.2d 94, 98 (5th Cir. 1993) (concerning FBI agent's testimony regarding marks of particular screwdriver on stolen car); *United States v. Ware*, 914 F.2d 997, 1003 (7th Cir. 1990) (admitting expert testimony by ATF agent regarding interstate shipment of shotguns based on experience-based knowledge of distinctive markings of same); *United States v. Bowers*, 534 F.2d 186, 194 (9th Cir. 1976) ("'tool mark identification' rests upon a scientific basis and is a reliable and generally accepted procedure.").

[12] *See, e.g., Cotton v. State*, 675 So.2d 308 (Miss. 1996) (detective's explanation that gun's mechanical features, coupled with his opinion that weapon would not fire unless specific sequence of events was followed, was admissible specialized knowledge); *United States v. Davis*, 103 F.3d 660 (8th Cir. 1996) (bullets must have come from gun with a very worn barrel); *Van Pelt v. State*, 816 S.W.2d 607, 611 (Ark. 1991) (shell casings); *State v. Griffin*, 691 A.2d 556, 558 (R.I. 1997) (whether gun of one caliper is capable of firing bullet of

A prime example is the way the expert fingerprint analysis by FBI Agent Carol Edelin survived scrutiny under *Daubert* and led to the conviction of Ahmad Mohammad Ajaj in the World Trade Center bombing. *United States v. Salameh*, 152 F.3d 88,128-130 (2d Cir. 1998).

Daubert's four factors have rarely been invoked in challenging such time-tested testimony, and successful challenges have been rarer still. Nevertheless, a recent decision applying the *Daubert* factors to exclude the opinion testimony of expert arson investigators, *Michigan Millers Mutual Insurance Corp. v. Benfield*, 140 F.3d 915 (11th Cir. 1998), combined with the prospect that this Court might credit the arguments of Petitioners and their *amici* that *Daubert* should apply to every type of opinion that could implicate or be based on scientific principles, theories, techniques, or data, raises the ominous specter that more challenges will be forthcoming and more challenges will succeed.

This would lead to no end of mischief. If criminal defendants were able to demand that the testimony of law enforcement experts on the sort of garden-variety matters listed above must satisfy *Daubert*'s four factors, it is doubtful that much such testimony

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another).

[13] *See, e.g., State v. Goode*, 461 S.E.2d 631, 641 (N.C. 1995) (expert interpretation of bloodstain patterns is admissible as a "'specialized crime scene technique' wherein a specially trained individual studies the blood and the types of stains at the scene of the crime, and then, based upon his knowledge of similar bloodstain characteristics and reproductions of the crime scene, he forms an opinion about 'what actually occurred [at] the crime scene.' In order to determine what occurred at the crime scene using this method of proof, experts rely upon specific categories of bloodstains which are defined by the way in which they are made. These categories can be established through observation and reconstruction, as similar stains are produced under similar circumstances." *See also State v. Rodgers*, 812 P.2d 1208 (Idaho 1991); *Grimstead v. State*, 684 N.E.2d 482, 487 (Ind. 1997); *Fox v. State*, 506 N.E.2d 1090 (Ind.1987); *State v. Hall*, 297 N.W.2d 80 (Iowa 1980), *cert. denied*, 450 U.S. 927 (1981); *State v. Melson*, 638 S.W.2d 342 (Tenn.1982), *cert. denied*, 459 U.S. 1137 (1983); *Compton v. Commonwealth*, 250 S.E.2d 749 (Va. 1979).

generally would pass muster—largely because those tests are inappropriate to gauge the reliability of the testimony.

Nor is there any reason to suppose that defendants would refrain from challenging other sorts of law enforcement testimony, such as testimony about *modus operandi*, that is perhaps even less scientific or technical in origin and methodology than that required for arson investigation, accident reconstruction, fingerprint analysis, bloodstain pattern identification, and ballistics evidence, yet is just as important.

A stunning example of expert evidence that could be excluded under this formulation comes from the last—and spectacularly successful—prosecution of John Gotti, who had become known as "The Teflon Don" for his ability to evade conviction. Although court-ordered wiretaps were essential in gaining his conviction on racketeering charges, those wiretaps were, by themselves, insufficient to convince jurors that Gotti was the criminal mastermind prosecutors claimed that he was. Equally essential was the ability of an FBI expert to "translate" the strange argot overheard on those wiretaps and to explain how the Mafia operates—its *modus operandi*. The Second Circuit called FBI agent Lewis Schiliro's interpretation of the intercepted conversations the "most significant evidence" in the case. *United States v. Locascio*, 6 F.3d 924, 930, 936 (2d Cir. 1993). Agent Schiliro described the rules of the Mafia, including the functions of the "boss" (Gotti), the "underboss," and the "consigliere"—in short, the *modus operandi* of organized crime. *Id.* at 936.

In response to defense objections that Agent Schiliro's testimony did not satisfy Fed. R. Evid. 702 because his testimony was insufficiently scientific (he lacked academic training in linguistics, the sociology of crime, tape recording technology, and voice analysis), the court looked to Agent Schiliro's experience and its relevance to the task at hand. He had been an FBI agent for seventeen years, including both five years with the Bureau's Organized Crime Program and two years as the supervisor of that program. "Agent Schiliro did not need to be a voice analysis expert to be able to recognize the defendants-appellants voices on the tapes, nor did he need a linguistics degree to understand what was

being said." *Id.* at 937. His specialized knowledge, garnered through experience, allowed him to testify as an expert under Rule 702. If, however, *Daubert*'s specific standards for scientific testimony had been applied to Agent Schiliro's opinions, he might have been required to explain underlying scientific bases for his knowledge. And he might not have been able to do so. And John Gotti might be a free man.

Testimony like that of Agent Schiliro is commonly used not only in major prosecutions against organized crime[14] but in all types of cases, large and small, including in prosecutions for arson,[15] sex

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[14] *See also, e.g., United States v. Saccoccia*, 58 F.3d 754 (1st Cir. 1995) (testimony that structure of operations necessitates money laundering); *United States v. Amuso*, 21 F.3d 1251 (2d Cir. 1994) (testimony that only "boss" can authorize executions).

[15] *Compare People v. Erving*, 73 Cal. Rptr. 2d 815 (Cal. Ct. App. 1998) (noting testimony of arson expert), *and State v. Hale*, 474 S.E.2d 328 (N.C.1996) (admitting testimony of fire marshal), *with Michigan Millers Mutual Ins. Corp. v. Benfield*, 140 F.3d 915 (11th Cir. 1998) (finding similar qualifications and method inadmissible under *Dcubert* in declaratory judgment action by insurance company).

offenses,[16] murder,[17] gang violence,[18] auto theft,[19] prostitution,[20] fraud,[21] and drug smuggling.[22]

If this Court embraces petitioners' credo that there are no discernible lines between scientific knowledge, on the one hand, and specialized and technical knowledge, on the other, and thus that all kinds of knowledge, of whatever origin, should be measured by *Daubert*'s four factors, it is doubtful that Agent Schiliro would be

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[16] *See, e.g., United States v. Bighead*, 128 F.3d 1329 (9th Cir. 1997) (finding that *Daubert* does not apply to exclude testimony about "delayed disclosure" and "script memory" among child sexual abuse victims); *Roberts v. State*, 912 P.2d 1110 (Wy. 1996) (testimony on "grooming" victims to make them comfortable with increasing closeness); *Dailey v. Florida*, 594 So.2d 254 (Fla. 1992) (testimony on pattern of scattered clothing establishing sexual battery penalty enhancement in murder trial).

[17] *See, e.g., State v. Moseley*, 449 S.E.2d 412 (N.C. 1994) (testimony regarding similarities of injuries among victims); *State v. Russell*, 882 P.2d 747 (Wash. 1994) (en banc) (testimony regarding arrangement of corpses in poses).

[18] *See e.g., People v. Williams*, 940 P.2d 710 (Cal.1997) (testimony regarding characteristics of gangs and drive-by shooting); *State v. Toney*, 862 P.2d 350 (Kan. 1993) (testimony regarding gang characteristics and conduct).

[19] *See, e.g., State v. Griffin*, 866 P.2d 1156 (N.M. 1993) (testimony regarding method of drilling holes in molding).

[20] *See, e.g., Moore v. United States*, 609 A.2d 1133 (D.C .1992) (testimony regarding use by male homosexual prostitutes of terms "top" and "bottom").

[21] *See, e.g., United States v. Yoon*, 128 F.3d 515, 526-528 (7th Cir. 1997) (FBI agent's expert testimony on check kiting admitted, over objection, under liberal reading of *Daubert*); *United States v. Charroux*, 3 F.3d 827 (5th Cir. 1993) (testimony on use of term "kickbacks" in "land-flip" deals in prosecution for tax evasion).

[22] *See, e.g., United States v. Klimavicius-Viloria*, 144 F.3d 1249 (9th Cir. 1997) (DEA agent testimony on preferred smuggling routes); *United States v. Montas*, 41 F.3d 775 (1st Cir. 1994) (testimony on use of false names to check bags and buy tickets).

allowed to testify against John Gotti's successor. We respectfully suggest that this Court must make lines discernible, differentiating the kinds of experts we describe here, their knowledge, and how they gained it, from the outer edges of science involved in *Daubert*.

Excluding this kind of testimony would have immediate, drastic, and negative effects on the ceaseless struggle against organized crime, drug traffickers, and international terrorists. It also would severely impact prosecution of more everyday, but no less frightening, crimes such as child abuse, domestic violence, and drunk driving, and it would severely impede the war on drugs. Let us describe how.

Child abuse cases

The abuse of children is seldom a public phenomenon. It takes place in private, with the perpetrator often someone who wields significant power over the child. Using the child as a witness presents difficulties. *See State v. D.R.*, 537 A.2d 667, 672 (NJ 1988).

How expert witness testimony can be useful in the prosecution of the perpetrator is well illustrated by *People v. McAlpin*, 812 P.2d 563 (Cal. 1991) (in banc). In *McAlpin*, the court approved expert witness testimony from a police officer, Jeffrey Miller, who had received 350 to 400 hours of specialized training and who had investigated over 100 cases of child abuse or molestation. The officer was permitted to testify about why a parent might not report a known incident of molestation and whether there was a profile of a typical child molester. *Id.* at 567-568.

Officer Miller's expert testimony was useful in dispelling stereotypes jurors might have harbored about child abuse. As the court noted, "Most jurors, thankfully, have been spared the experience of being the parent of a sexually molested child." *Id.* at 569. The court found that testimony that parents commonly, and for understandable reasons, do not report known instances of abuse was useful in rehabilitating the credibility of the mother of the victim. *Id.* The defendant portrayed himself as an upstanding member of the community, but Officer Miller testified that anyone could be a child abuser; the stereotype of "an old man in shabby clothes who loiters in playgrounds" is inaccurate and dangerous. *Id.* at 870-871.

The court's discussions of Officer Miller's qualifications and the methodology underlying his testimony makes it seem unlikely, at best, that his critical testimony would have been admissible in *McAlpin* if the criteria outlined in *Daubert* for evaluating scientific evidence had been applied. *See id.* at 567-568, 571-572. *See also United States v. Bighead*, 128 F.3d 1329, 1330 (9th Cir. 1997) (*Daubert* is not appropriately applied to "specialized knowledge" testimony gained from interviewing victims of child abuse).

Domestic violence cases

No fewer than one million,[23] and as many as four million,[24] American women suffer from domestic violence in any given year. Expert witness testimony can be very useful to rehabilitate the credibility of victims or to explain why they recant. *See* Cynthia Lynn Barnes, Annotation, *Admissibility of Expert Testimony Concerning Domestic Violence Syndromes to Assist Jury in Evaluating Victim's Testimony or Behavior*, 57 A.L.R. 5th 315 (1998). It also can be useful to demonstrate the effects of domestic violence on children. *See* Audrey E. Stone and Rebecca J. Fialk, *Criminalizing the Exposure of Children to Family Violence: Breaking the Cycle of Abuse*, 20 Harv. Women's L.J. 205 (1997).

Theories of domestic violence have been developed outside of traditional science and expertise in domestic violence is not confined to members of traditional learned professions. "[T]he shelter workers who work with battered women every day—answering hot line calls, conducting intake interviews, providing shelter, transportation, and comfort—usually do not have degrees of any kind, yet these advocates are clearly the experts on battered women's lives as measured by the amount and quality of their contact with battered women." Alana Bowman, *A Matter of*

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[23] Bureau of Justice Statistics Special Report: Violence Against Women: Estimates from the Redesigned Survey, NCJ-154348, 3 (August 1995).

[24] American Psychological Association, Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family 10 (1996).

Justice: Overcoming Juror Bias in Prosecutions of Batterers Through Expert Witness Testimony of the Common Experiences of Battered Women, 2 S. Cal. Rev. L. & Women's Stud. 219, 229 (1992). Stone and Fialk suggest that prosecutors "develop a pool of potential experts from the community. For instance, social workers with extensive training and experience can testify to the detrimental impact of family violence on a child's development." Stone and Fialk, *supra* at 225. *See also id.* at n.114 (citing cases).

Whether such testimony is admissible can be governed by whether the testimony is characterized as "scientific" and whether *Daubert* criteria are rigidly applied. In *State v. Borelli*, 629 A.2d 1105 (Conn. 1993), the court demonstrated flexibility in admitting the expert testimony of a social worker, opining that this kind of testimony should be excluded only when the jurors might sacrifice their independent judgment to that of the expert. Contrast this result with that in *Fowler v. State*, 958 S.W.2d 853 (Tx. App. 1997, pet. granted) in which the court rigidly applied a *Daubert* analysis to exclude testimony from a similarly qualified witness.

The War on Drugs

Local prosecutors are soldiers in the war on drugs, largely responsible for bringing to trial persons arrested on drug abuse charges —1.4 million of them in the latest reporting period.[25] In these prosecutions, trained and experienced officers often give opinions about the meaning of words,[26] the implications of

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[25] FBI, Uniform Crime Reports for the United States 213 (1996).

[26] *See, e.g., United States v. Spriggs*, 102 F.3d 1245 (D.C. Cir. 1997); *United States v. Garcia*, 86 F.3d 394 (5th Cir. 1996); *United States v. Romero*, 57 F.3d 565 (7th Cir. 1995); *United States v. Lowe*, 9 F.3d 43 (8th Cir. 1993).

particular quantities or mode of delivery of drugs,[27] and the identity and implications of drug records and paraphernalia.[28]

These witnesses are necessary to help juries understand drug jargon, which is a "specialized body of knowledge." *United States v. Griffith*, 118 F.3d 318 (5th Cir. 1997). They can show juries that a person who possesses heroin of high purity, heroin that causes instant death if ingested, is no small time user, but someone high up in the drug chain. *See,. e.g., United States v. Gibson*, 105 F.3d 1229, 1234-35 (8th Cir. 1997). They can help juries understand that seemingly innocent numbers on the back of a business card are actually evidence of a sinister drug transaction. *See, e.g., United States v. Cartagena-Carrasquillo*, 70 F.3d 706 (1st Cir. 1995). Juries should not be deprived of their expertise by the application of a test designed for epidemiologists performing cutting edge science.

Drunk driving cases

According to the 1996 FBI Uniform Crime Reports, about 1.4 million arrests were made for DUI in that year, the same number of arrests as were made for drug offenses.[29] Obviously prosecutors are concerned about smooth handling of this voluminous caseload.

Despite growing use of breath and blood analysis, the expert opinions of law enforcement officers regarding the intoxication of defendants remain important evidence in DUI prosecutions. *See, e.g., State v. Gregoroff*, 951 P.2d 578 (Mont. 1997) (finding officer, by training and experience, expert in accident reconstruction and

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[27] *See, e.g., United States v. Boyd*, 55 F.3d 667 (D.C. Cir. 1995); *United States v. Speer*, 30 F.3d 605 (5th Cir. 1994); *United States v. Aminy*, 15 F.3d 258 (2d Cir. 1994); *United States v. Gastiaburo*, 16 F.3d 582 (4th Cir. 1994); *United States v. Muldrow*, 19 F.3d 1332 (10th Cir. 1994); *United States v. Mabry*, 3 F.3d 244 (8th Cir. 1993); *U nited States v. Stevenson*, 6 F.3d 1262 (7th Cir. 1993).

[28] *See, e.g., United States v. Brown*, 110 F.3d 605 (8th Cir. 1996); *United States v. Parker*, 32 F.3d 395 (8th Cir. 1994); *United States v. Quiroz*, 13 F.3d 505 (2d Cir. 1993).

[29] FBI, Uniform Crime Reports for the United States 214 (1996).

qualified to give opinion that DUI defendant had fallen asleep or lost sight of where he was going); *Hawkins v. State*, 476 S.E.2d 803, 808 (Ga. Ct. App. 1996) (finding that officer can give expert opinion yielded from administration of field sobriety tests, without first proffering scientific foundational testimony); *Commonwealth v. Rhodes*, 949 S.W.2d 621, 622 (Ky. Ct. App. 1996) (holding that conviction can stand on expert officer's opinion testimony, without resort to various scientific devices).

An application of Rule 702 which required officers to relate the scientific underpinnings which lead to their conclusions could render them unable to give testimony on which the criminal justice system justifiably relies.

II ADDITIONAL GUIDANCE, IF ANY IS NEEDED, SHOULD NOT COME IN THE FORM OF NEW, BETTER, OR ADDITIONAL CRITERIA THAT SHALL APPLY TO ALL TYPES OF EXPERT TESTIMONY IN ALL TYPES OF CASES BUT RATHER IN THE FORM OF PROVIDING GENERAL CRITERIA TO ALLOW TRIAL COURTS TO BETTER GAUGE THE RELIABILITY OF PROFFERED TESTIMONY IN PARTICULAR CASES.

Amicus would be content if this Court made clear to the lower courts that the specific *Daubert* factors do not apply to law enforcement experts who testify, *inter alia*, as accident reconstructionists, arson investigators, handwriting, voice, fingerprint, and footprint analysts, or experts in the *modus operandi* of organized crime bosses, drug smugglers, or pedophiles. These persons are irreplaceable, reliable witnesses worthy of sharing their knowledge with juries.

Daubert emphasized that a trial court must assure that a particular expert is worthy of waiving the rule that witnesses do not give opinions and that the testimony of witnesses must be based on firsthand knowledge. Worthiness is "premised on an assumption that the expert's opinion will have *a reliable basis in the knowledge and experience of his discipline*." 509 U.S. at 592 (emphasis supplied).

In *Daubert*, the discipline was science, and the Court noted that the trial court must preliminarily assess "whether the reasoning or methodology underlying the testimony is scientifically valid." 509 U.S. at 592-593. The Court then elaborated criteria which would illuminate scientific validity, articulating specific guidelines for a particular discipline. *Id.* at 593-94.

The methodology is clear: define the discipline involved, and then look to the discipline to discern appropriate standards of reliability. In *Daubert*, that involved a detailed look at how scientists ply their trade and what they use as indicia of reliability. We propose no more, and no less, for tests of witnesses who are offering "technical" or "other specialized" knowledge under Federal Rule of Evidence 702.

The concurring opinion of Senior District Judge Jenkins, sitting by designation, in *United States v. Webb*, 115 F.3d 711 (9th Cir. 1997), provides a fine explication of this framework and an excellent example of how it would be applied to an officer offering testimony of *modus operandi*. About the general inquiry, Judge Jenkins writes:

> In evaluating the admissibility of testimony as to technical or other specialized knowledge, the trial court in each instance must examine whether what is proffered as knowledge truly deserves the label, and must ask 'does this particular expert have sufficient specialized knowledge to assist the jurors in this case?' 3 Jack Weinstein & Margaret Berger, *Weinstein's Evidence: United States Rules* ¶ 702[01], at 702-9 (1995)."
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> *Daubert* offers some general observations concerning the factors bearing upon the inquiry whether the reasoning or methodology underlying proffered testimony as to 'scientific knowledge' is scientifically valid, i.e., that it is 'derived by the scientific method.' 509 U.S. at 590, 113 S. Ct. at 2795. *See id.* at 593-94, 113 S. Ct. at 2796-97. Similar factors pertaining to the validity of 'technical or other specialized knowledge' have not yet found a comparable catalogue in the reported cases. Nevertheless, 'the trial judge cannot ... make a determination as to admissibility without investigating the competence the particular proffered expert would bring to bear on the issues. Only then will the judge be able to decide whether the test of Rule 702 - assistance to the trier of fact - has been satisfied.' 3 Weinstein & Berger ¶ 702[04], at 702-60. Looking beyond the general qualifications of a witness, the recurring question 'Does a person generally qualified in a field have sufficient specific knowledge to deal with the particular issues in the case at hand?' must be resolved in the first instance by the trial judge. *Id.* at 702-61 to 702-62, 702-75. *Cf. Minasian v. Standard Chartered Bank, PLC*, 109 F.3d 1212, 1216 (7th Cir.1997) (proffered banking expert "did not gather any data on the subject, survey the published literature, or do any of the other things that a genuine expert does before forming an opinion").

Id. at 717-18 (footnotes omitted). He then distills an inquiry into "reliability" and "fit" under *Daubert* into two questions about the witness and proffered testimony: "What does he know?" and "How does it help?" *Id.* at 718.

This framework is one courts can apply readily. It is not about epistemology. It is about resolving cases, and it conforms to this Court's teaching in *Joiner* that the expert must explain how one gets from the facts to the expert conclusion.

CONCLUSION

This Court should affirm the ruling of the Court of Appeals for the Eleventh Circuit. In doing so it should make clear that the reliability inquiry that informs a trial judge's gatekeeping responsibility does not serve as an obstacle to testimony based on "technical" or "specialized" knowledge that is gained and used in a manner consistent with the methodology of the relevant community of experts.

Respectfully submitted,

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